IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Attorney Docket No. 16106US02

In the Application of:
Frederic Hayem, et al.

Electronically filed on 22-JUN-2007

Serial No. 10/733,856

Filed: December 11, 2003

For: SYNCHRONIZATION OF MULTIPLE PROCESSORS IN A MULTI-MODE WIRELESS COMMUNICATION DEVICE

Examiner: Fred A. Casca

Group Art Unit: 2617

Confirmation No. 8105

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The Applicant requests review of the final rejection in the above-identified application, stated in the final Office Action mailed on February 22, 2007 (hereinafter, the Final Office Action) with a period of reply through June 22, 2007, in accordance with the attached request for one-month extension. The Applicant also requests review of the arguments stated on page 2 of the Advisory Office Action mailed on May 3, 2007 (hereinafter, the Advisory Office Action). No amendments are being filed with this request.

This request is being filed with a Notice of Appeal. The review is being requested for the reasons stated on the attached sheets.

REMARKS

Claims 1, 4-5, 8-9, 20, 24 and 27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2002/0141441, issued to Neumann, et al. (hereinafter, Neumann), in view of U.S. Patent No. 6,594,242, issued to Kransmo, et al. (hereinafter, Kransmo). Claims 2, 10-15, 17-19, 21 and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Neumann, in view of Kransmo and further in view of U.S. Patent No. 5,251,220, issued to Schutte (hereinafter, Schutte). Claims 16 and 27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Neumann, in view of Kransmo and further in view of Schutte and still further in view of U.S. Patent No. 6,098,178, issued to Moretti, et al. (hereinafter Moretti). The Applicant respectfully submits that the claims define patentable subject matter. The Applicant also respectfully traverses these rejections at least for the following reasons:

I. Rejection of Claims 1, 4-5, 8-9, 20, 24 and 27 under 35 U.S.C. § 103(a) Using Neumann and Kransmo

With regard to the rejection of independent claim 1 under 103(a), the Applicant submits that the combination of Neumann and Kransmo does not disclose or suggest at least the limitation of "said host baseband processor **enables timing synchronization** between said first and second wireless communications systems **on the basis of timing information transferred to said host baseband processor from said baseband co-processor**," as recited by the Applicant in independent claim 1 (emphasis added).

The Final Office Action concedes on page 4 thereof, that "Neumann does not specifically disclose timing synchronization between the first and second wireless communications systems on the basis of timing information transferred to said host baseband processor from said baseband co-processor." To overcome this deficiency, the Final Office Action relies on Kransmo.

The Applicant notes that Examiner is specifically relying on Kransmo to teach that synchronization between a first and a second wireless communications systems occurs on the basis of timing information transferred to a host baseband processor from a baseband co-processor. To support this argument, the Examiner is citing extensively from Kransmo. However, **none of the Kransmo citations** used by the Examiner (*See* the Final Office Action at page 4) **disclose that synchronization** between first and a second wireless communications systems **occurs on the basis of timing information transferred to a host baseband processor from a baseband co-processor**, as claimed by the Applicant in claim 1.

In the Advisory Office Action, the Examiner is further relying on several reference books (by W. Stallings and J. Gibson), and states the following:

> To establish this synchronization between the transmitter and the receiver's clocks, **the transmitter sends pulses to the receiver, and the receiver uses**

these pulses to get in synch with the transmitter before the data transmission takes place.

See the Advisory Office Action at page 2. **In other words, the Examiner has used the additional technical references to point out a known and conventional synchronization technique, i.e., a transmitter sends a synchronization pattern (such as the pulses mentioned by the Examiner) and the receiver locks onto the synchronization pattern/pulses for purposes of synchronization. However, the Applicant points out that a transmission of pulses, which is the conventional technique disclosed in the technical references cited by the Examiner's, is not the same as the direct transfer of timing information between a baseband processor and a baseband co-processor, as recited in Applicant's claim 1. In fact, none of the technical references cited by the Examiner even disclose a transfer of any information between a baseband processor and a baseband co-processor for purposes of effectuating synchronization.** The Applicant, therefore, maintains the arguments stated on pages 16-22 of the April 23, 2007 response, and as summarized below.

In addition, according to the Examiner, Kransmo discloses that "a 3G mobile terminal *can synchronize with a GSM carrier based on the frame timing* in order to handover or roam..." *See* the Final Office Action at page 3, citing Kransmo. In this regard, the Examiner has taken the position that **Kransmo discloses that synchronization for purposes of handover is based on frame timing. Accordingly, by the Examiner's own admission, the synchronization is not based on timing information transferred from the host processor to the baseband co-processor. In this context, Kransmo discloses synchronization between a 3G mobile terminal and a GSM carrier that is based on frame timing. There is no mention in Kransmo of synchronization based on timing information transferred between the two baseband processors, as recited in Applicant's claim 1.**

The Applicant would like to emphasize that the important issue here is not whether or not Kransmo enables timing synchronization, but **how** timing synchronization is in fact achieved. For example, the Applicant achieves timing synchronization on the basis of timing information that is transferred from the host baseband processor to the baseband co-processor, as recited in claim 1. As previously pointed out by the Applicant, Kransmo does not disclose or suggest timing synchronization on the basis of timing information that is **transferred to the host baseband processor from the baseband co-processor**, as recited in claim 1.

Since Kransmo is silent as to how timing synchronization is achieved, the Examiner is relying on inherence. The Applicant respectfully maintains the traversal of the assertion of inherency, as stated in the April 23, 2007 response.

Therefore, neither Neumann nor Kransmo disclose or suggest that a "host baseband processor enables timing synchronization between said first and second wireless communications systems on the basis of timing information transferred to said host baseband processor from said baseband co-processor," as recited by the Applicant

in independent claim 1. Accordingly, the proposed combination of Neumann and Kransmo does not render independent claim 1 unpatentable, and a *prima facie* case of obviousness has not been established. The Applicant submits that claim 1 is allowable. Independent claims 9 and 20 are similar in many respects to the device disclosed in independent claim 1. Therefore, the Applicant submits that independent claims 9 and 20, as well as dependent claims 4-5, 8, 24 and 27, are also allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 1.

II. Rejection of Claims 2, 10-15, 17-19, 21 and 23 under 35 U.S.C. § 103(a) Using Neumann, Kransmo and Schutte

With regard to the rejection of independent claim 15 under 103(a), the Applicant submits that the combination of Neumann, Kransmo and Schutte does not disclose or suggest at least the limitation of **"generating within a multi-mode communication device, a timer capture interrupt** during a predetermined timing phase of a first wireless communication system," as recited by the Applicant in independent claim 15. **In light of the above arguments stated in section I of this paper, the Applicant points out that the combination of Neumann, Kransmo and Schutte also does not disclose or suggest the limitation of determining a timing relationship between a first and a second wireless communication system based upon said timer value of at least one time pertinent to operation of the second wireless communication system in response to the timer capture interrupt, as recited in Applicant's claim 15.**

The Applicant maintains the arguments stated on pages 23-29 of the April 23, 2007 response, which are summarized below.

The Applicant points out that the **Neuman/Kransmo combination not only does not teach "timing capture interrupt", but also does not teach at least the limitation of "generating within a multi-mode communication device, a timer capture interrupt during a predetermined timing phase of a first wireless communication system."** Consequently, to correct this deficiency in the Neumann/Kransmo combination, the Examiner is relying on Schutte.

The Applicant maintains that Schutte does not disclose "generating within a multi-mode communication device, a timer capture interrupt during a predetermined timing phase of a first wireless communication system," as recited in claim 1. In fact, Schutte also does not disclose or suggest a multi-mode communication device that communicates via a first and a second wireless communication protocol, as claimed by the Applicant in claim 15.

In the Advisory Office Action, the Examiner states that "the concept of generating timing capture interrupts is very well known in the art and Schutte teaches it as well." The Applicant respectfully disagrees with these unsupported assertions. After careful review of the citations used by the Examiner in the Final Office Action (col. 4, line 65 through col. 5, line 18, and col. 2, lines 7-32), as well as the remainder of

Schutte, the Applicant has been unable to identify where Schutte discloses the limitation of "**generating** within a multi-mode communication device, **a timer capture interrupt during a predetermined timing phase of a first wireless communication system**," as recited by the Applicant in independent claim 15. For example, Schutte discloses, at col. 2, lines 7-32, that a microprocessor may use a clock to monitor data for a synchronizing word or sequence of bits. **This does not relate in any way to generating a timer capture interrupt, storing a timer value based on the interrupt, and determining a timing relation ship between a first and second wireless communication systems based on the timer value**, as claimed by the Applicant in claim 15. To the extent that the Examiner is implicitly relying on inherency, the Applicant traverses any such implicit assertion of inherency.

Accordingly, the proposed combination of Neumann, Kransmo and Schutte does not render independent claim 15 unpatentable, and a *prima facie* case of obviousness has not been established. The Applicant submits that claim 15, as well as dependent claims 2, 10-14, 16-19, 21, 23, and 27 are allowable.

III. Conclusion

The Applicant respectfully submits that claims 1-27 of the present application should be in condition for allowance at least for the reasons discussed above and request that the outstanding rejections be reconsidered and withdrawn. The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Respectfully submitted,

Date: 22-JUN-2007 By: _____

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